

150 Mineral Spring Drive Dover, New Jersey 07801 Phone (973) 361-3600 FAX (973) 361-3800

LETTER OF TRANSMITTAL

Job No.:

94039.00 T1

		FA2	K (9/3) 361-3800		Attention	Joseph J. Nowak	
					Re:	Hexcel Corporation	<u> </u>
To:	NJDEP-E	BEECRA				Lodi Borough, Bergen Cou	inty, NJ
	401 East	State Stree	et			ISRA Case No. 86009	
	Trenton,	NJ 08625					
WE	ENCLOS	SE THE F	OLLOWING:	VIA:	00	Courier /Hand Delivered First Class Mail	Overnight Express
	COPIES	DATE			DE	SCRIPTION	
	3	10/29/97	Progress Report for the third of	quarter of 1	997		
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	<u> </u>						
Rem	arks:						

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COI	Y TO:	A. Willian Edward A	n Nosil Hogan, Esq.		SIGNED		L. Lutte rie A. Piette
		File					

Date:

10/30/97

If enclosures are not as noted, kindly notify us at once.





150 Mineral Spring Drive Dover, New Jersey 07801 973 361-3600 FAX 361-3800

October 29, 1997

Joseph J. Nowak
New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment
401 East State Street, CN 432
Trenton, NJ 08625

SUBJ: Hexcel Corporation
Lodi Borough, Bergen County, New Jersey
ISRA Case No. 86009
GEO Project No. 94039

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), the following is the progress report of activities carried out during July, August and September of 1997. This quarterly report is prepared in accordance with the Industrial Site Recovery Act (ISRA) requirements for the former Hexcel facility in Lodi, New Jersey.

Please note that GEO Engineering has merged with the firm of Haley and Aldrich, Inc. This will not affect Hexcel's ISRA case, except that future reports and letters from our office will carry the logo of Haley and Aldrich. Our relationship with Hexcel remains unchanged and the same personnel will continue to conduct the ISRA work.

The following topics are discussed in this progress report:

- 1. Ground Water/DNAPL/LNAPL Monitoring
 - a) Quarterly Monitoring
 - b) Monthly Monitoring
- 2. Product Recovery Program
 - a) DNAPL Recovery
 - b) LNAPL Recovery
- 3. Ground Water Treatment System
- 4. Off-Site Investigation

- 5. Sediment Sampling
- 6. Waste Disposal Documentation
- 7. Schedule and Cost Estimates

1. Ground Water/DNAPL/LNAPL Monitoring

This section includes the results of quarterly monitoring performed in July 1997 and monthly monitoring performed in August and September 1997. Modifications to the NJDEP-approved "Groundwater/DNAPL/LNAPL Monitoring Plan" prepared by Killam Associates were presented in our progress report dated October 24, 1994. The modifications were approved by the NJDEP in its June 12, 1995 letter. Sections 1a and 1b provide details for quarterly and monthly monitoring, respectively.

1a. Quarterly Monitoring

Hexcel conducted quarterly ground water elevation, DNAPL and LNAPL monitoring on July 28, 1997, in accordance with the monitoring plan. Appendix A contains figures and tables developed from the quarterly monitoring. These are discussed below. Results of the quarterly monitoring are tabulated in Table 1. Figures 1 and 2 illustrate shallow and deep ground water elevation contours, respectively. Contour Map Reporting Forms are included for each of the contour maps. Table 2 contains a summary of well construction data to accompany the Contour Map Reporting Form for Figure 1.

1b. Monthly Monitoring

In addition to the quarterly monitoring conducted in July, Hexcel conducted monthly DNAPL and LNAPL monitoring on August 12 and September 9, in accordance with the monitoring plan and modifications approved by the NJDEP in its June 12, 1995 letter. The following modifications were made to the monthly monitoring plan in the third quarter of 1997.

• CW-7 was monitored in August and September subsequent to presence of LNAPL observed in the well at the time of the quarterly monitoring in July.

Results for the August and September monthly monitoring are provided in Tables 3 and 4 located in Appendix B.

Hexcel will continue to modify the monthly monitoring by the addition or deletion of wells in accordance with the approved plan.

2. Product Recovery Program

This section includes results for the temporary product recovery program currently being implemented at the site. The product recovery program, performed on a weekly basis, was initiated on October 20, 1994, and consists of recovering product from affected wells. During the early stages of the program, bailers were used to recover product. Presently, most wells have been equipped with tubing that can be connected to peristaltic pumps that help recover the product. After one month, the program's frequency was reduced to twice a month due to a reduction in the quantity of product recovered. Product recovery continued at the rate of at least twice a month through the week of June 19, 1995. In accordance with the NJDEP's June 12, 1995 letter, weekly product recovery was resumed the week of June 26, 1995.

In its May 23, 1996 letter, the NJDEP approved modifications to the weekly product recovery program for LNAPL and DNAPL. The modifications proposed by Hexcel changed the criteria for inclusion of wells in the weekly product recovery program. The modifications were communicated to the NJDEP in a letter dated September 21, 1995 and also in the October 1995 progress report. According to the modifications, any well which has no measurable recovery for three consecutive weekly recovery rounds will be moved to monthly monitoring and recovery. For the purposes of product collection, quantities greater than 0.1 gallon (approximately 1 cup) are considered to be measurable. Based on our experience, if the product interface meter does not signal the presence of product, then it is not possible to pump a significant amount of DNAPL from the well, even when DNAPL is observed on the probe. Therefore, DNAPL recovery is usually attempted only when there is a signal from the product interface meter indicating the presence of product.

2a. DNAPL Recovery

During the third quarter of 1997, monitoring wells MW-6 and PB-2 were monitored for the presence of DNAPL on a weekly basis. Product recovery was attempted every time the product interface probe indicated measurable product. Approximately 0.2 gallons of DNAPL from MW-6 and 0.5 gallons of DNAPL from PB-2 were recovered during the third quarter of 1997. DNAPL recovery during this quarter is summarized in Table 5, located in Appendix C.

2b. LNAPL Recovery

Subsequent to detection of LNAPL in CW-7 during the quarterly monitoring in July 1997, LNAPL recovery was performed at this well. A total of approximately 1.3 gallons of LNAPL were recovered from CW-7 in three consecutive weeks following the

quarterly monitoring. Monitoring for five additional weeks, till the end of September, did not indicate further recoverable product. LNAPL recovery is summarized in Table 6, located in Appendix C.

3. Ground Water Treatment System

Ground water as basement seepage water continues to be treated on-site and discharged to the Passaic Valley Sewerage Commissioners (PVSC) sewer line. This continues to depress the ground water in this area allowing for the recovery of contaminated ground water in the vicinity of the basement.

4. Off-Site Investigation

Hexcel believes that off-site investigation by Hexcel for soil and ground water contamination at Napp Technologies, Inc. (Napp) is unnecessary at this time. Napp is undergoing an ISRA investigation and has performed soil and ground water sampling at its site. Based on the review of Napp's Remedial Investigation Report and NJDEP's response to this report, we understand that further investigation will be conducted at this site by Napp.

We gained access to the U.S. Army Corps of Engineers (Army Corps) well across the Saddle River from the Hexcel site on October 28, 1997. We surveyed the well and measured the depth to water and depth to bottom in the well. We will evaluate this information together with the construction details of the well, provided by the Army Corps, and report our results in our next progress report.

5. Sediment Sampling

Sediment sampling was conducted on October 10, 1997. We will provide the results with our next progress report.

6. Waste Disposal Documentation

The disposal documentation for the third quarter of 1997 is provided in Appendix D. On July 16, 1997, approximately 1900 gallons of pumpable water treatment sludge were taken off-site for disposal via incineration at the Laidlow Environmental Services, Inc. (LES) facility in Bridgeport, New Jersey. On August 20, 1997, eleven 55-gallon drums of used personal protective equipment and one 55-gallon drum of contaminated Speedi-Dry were taken off-site for disposal via incineration at the LES facility in Deer Park, Texas. Also on August 20, 1997, thirty-seven 55-gallon drums of non-pumpable



water treatment sludge were taken off-site for disposal via incineration at the LES facility in Laurel, Maryland.

7. Schedule and Cost Estimates

Table 7 located in Appendix E presents an updated estimate of the schedule of remaining remedial activities. There has been no change to date in the estimate of cleanup costs.

We will continue to submit quarterly progress reports according to the schedule. Please call us if you have any questions regarding the above.

Sincerely,

GEO ENGINEERING

Marjorie A. Piette Project Manager

MAP/avm Enclosures

cc A. William Nosil Edward Hogan, Esq.

Appendix A

Quarterly Monitoring

Table 1: Quarterly Water Level/Product Thickness Measurements (7/28/97)

Table 2: Well Construction Data

Contour Map Reporting Form for Figure 1

Figure 1: Shallow Ground Water Elevation Contours on 7/28/97

Contour Map Reporting Form for Figure 2

Figure 2: Deep Ground Water Elevation Contours on 7/28/97

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls (July97 Quart)

Entered by: SG Checked by: SKT

Well ID	Type	Depth to	DNAPL	Product		_	Elevation		*************	******************	ction (all 4" diameter unless otherwise noted)
		Water (7/28/97)	DNAPL	LNAPL	Inickness	(7/28/97)	Top of Casing	Elevation	Туре	Casing	Comments
W Series:											
RW1-1	shallow	4.69				14.30	28.24	23.55	flush	s.steel	
RW6-1	shallow	N/A				N/A	28.84	N/A	flush	s.steel	Not accessible; pallets of drums covering the well.
RW6-2	shallow	3.07				14.79	29.34	26.27	flush	s.steel	Sediment on probe.
RW6-3	shallow	3.74				5.45	28.72	24.98	flush	s.steel	
RW7-1	shallow	5.72				16.53	26.25	20.53	flush	s.steel	Sediment on probe.
RW7-2	shallow	6.19				16.81	26.48	20.29	flush	s.steel	Sediment on probe.
RW7-3	shallow	6.39				17.25	26.78	20.39	flush	s.steel	Sediment on probe.
RW7-4	shallow	6.74				19.10	27.11	20.37	flush	s.steel	Product on probe (DNAPL)**.
RW7-5	shallow	7.31				19.25	27.57	20.26	flush	s.steel	
RW7-6	shallow	6.79				14.97	26.48	19.69	flush	s.steel	
RW7-7	shallow	6.81				14.86	26.89	20.08	flush	s.steel	
RW7-8	shallow	5.44				14.97	25.90	20.46	flush	s.steel	Sediment on probe.
RW7-9	shallow	6.79				16.17	26.87	20.08	flush	s.steel	Sediment on probe.
RW7-10	shallow	6.93				14.17	26.10	19.17	flush	s.steel	Sediment on probe
RW15-1	shallow	6.68				14.89	29.95	23.27	flush	s.steel	Sediment on probe.
RW15-2	shallow						30.15		flush	s.steel	Well not included in quarterly monitoring plan.
Series:											
P-1	shallow	6.35				9.50	30.09	23.74	flush	1.5" pvc	
P-2	shallow	WA				WA	30.19	WA	flush	1.5" pvc	Well was sealed on March 29, 1996.
Series:											
PI-1	deep						26.90		flush	R" s steel	Well not included in quarterly monitoring plan.

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls (July97 Quart)

Entered by: SG Checked by: SKT

Well ID	Туре	Depth to Water		Product	Product Thickness	_	Elevation	Water Elevation			ction (all 4" diameter unless otherwise noted)
		(7/28/97)	DNAPL	LNAPL	Inickness	(7/28/97)	Top of Casing	Elevation	Туре	Casing	Comments
W Series:											
CW-1	shallow	6.76				11.45	29.77	23.01	flush	s.steel	Sediment on probe.
CW-2	shallow				•••••		29.51	***************************************	flush	s.steel	Well not included in quarterly monitoring plan.
CW-3	shallow	***************			••••••		29.72		flush	s.steel	Recovery well; not included in monitoring plan.
CW-4	shallow	5.80				10.96	28.83	23.03	flush	s.steel	
CW-5	shallow	*******					28.67		flush	s.steel	Recovery well; not included in monitoring plan.
CW-6	shallow	•••••					28.93		flush	s.steel	Well not included in quarterly monitoring plan.
CW-7	shallow	7.51 *		7.35	1.35	13.99	26.13	18.62	flush	s.steel	The measured DTW is 8.70 ft.; refer to notes.
CW-8	shallow	8.22				13.90	26.77	18.55	flush	s.steel	
CW-9	shallow						26.37		flush	s.steel	Recovery well; not included in monitoring plan.
CW-10	shallow	7.30				10.21	25.91	18.61	flush	s.steel	
CW-11	shallow				•••••		25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan.
CW-12	shallow	7.18				13.95	25.71	18.53	flush	s.steel	Product on probe (DNAPL)**.
CW-13	shallow						26.05		flush	s.steel	Well not included in quarterly monitoring plan.
CW-14	shallow	7.55				13.88	26.37	18.82	flush	s.steel	
CW-15	shallow						26.31		flush	s.steel	Recovery well; not included in monitoring plan.
CW-16	shallow	7.46				13.91	26.45	18.99	flush	s.steel	Product on probe (DNAPL)**.
CW-17	shallow	6.82				13.94	26.25	19.43	flush	s.steel	Sediment on probe.
CW-18	shallow						26.61	I	flush	s.steel	Recovery well; not included in monitoring plan.
CW-19	shallow				I		26.50	I	flush	s.steel	Well not included in quarterly monitoring plan.
CW-20	shallow						26.74		flush	s.steel	Well not included in quarterly monitoring plan.
CW-21	shallow						26.77		flush	s.steel	Recovery well; not included in monitoring plan.
CW-22	shallow				· · · · · · · · · · · · · · · · · · ·	***************************************	26.35		flush	s.steel	Well not included in quarterly monitoring plan.

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls (July97 Quart)

Entered by: SG Checked by: SKT

Well ID	Туре	Depth to		Product							ction (all 4" diameter unless otherwise noted)
		Water (7/28/97)	DNAPL	LNAPL	Thickness	Bottom (7/28/97)	Top of Casing	Elevation	Туре	Casing	Comments
W Series:							·				
MW-1	(a)	9.71				23.52	32.42	22.71	stickup	pvc	
MW-2	shallow	7.48				10.25	31.00	23.52	stickup	pvc	
MW-3	deep	10.20				30.75	31.13	20.93	stickup	pvc	Sediment on probe.
MW-4	shallow	7.73				9.91	32.33	24.60	stickup	pvc	
MW-5	deep	11.01			***	28.34	32.54	21.53	stickup	pvc	
MW-6	shallow	9.95				18.35	30.74	20.79	stickup	pvc	Product on probe (DNAPL)**.
MW-7	deep	9.54				32.90	30.68	21.14	stickup	pvc	
MW-8	shallow	11.77				17.35	30.26	18.49	stickup	pvc	Product on probe (DNAPL)**.
MW-9	deep	8.67				29.55	29.83	21.16	stickup	pvc	
MW-10	shallow	12.44				16.77	30.83	18.39	stickup	pvc	
MW-11	deep	9.88				33.49	30.78	20.90	stickup	pvc	
MW-12	shallow	10.21				17.21	31.01	20.80	stickup	pvc	
MW-13	deep	9.57				33.19	31.16	21.59	stickup	pvc	
MW-14	shallow	11.32				15.59	30.70	19.38	stickup	pvc	
MW-15	deep	8.79				25.62	30.77	21.98	stickup	pvc	
MW-16	shallow	6.43				12.64	29.69	23.26	stickup	pvc	
MW-17	shallow	8.70				14.10	31.44	22.74	stickup	pvc	
MW-18	shallow	8.47				11.27	32.23	23.76	stickup	pvc	
MW-19	deep	7.03			 [26.59	29.08	22.05	stickup	pvc	
MW-20	shallow	4.85				20.08	27.95	23.10	flush	pvc	
MW-21	shallow	8.35				15.11	30.67	22.32	stickup	pvc	
MW-22	shallow	5.34			<u> </u>	8.24	28.45	23.11	flush	pvc	
MW-23	shallow	3.82				9.60	27.51	23.69	flush	pvc	
MW-24	shallow	3.34			<u> </u>	9.61	26.51	23.17	flush	pvc	
MW-25	shallow	7.33				12.79	26.03	18.70	flush	pvc	

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls (July97 Quart)

Entered by: SG Checked by: SKT

V	Well ID	Туре	Depth to	Depth to	Product	Product	Depth to	Elevation	Water	We	ll Constru	ction (all 4" diameter unless otherwise noted)
				DNAPL	LNAPL		Bottom (7/28/97)	Top of Casing	Elevation		Casing	Comments
мW	Series:											
	MW-26	(b)	8.82				17.93	28.85	20.03	flush	2" pvc	
ĺ	MW-27	shallow	6.92				12.53	31.43	24.51	stickup	pvc	
Ĺ	MW-28	shallow	10.41				14.81	29.68	19.27	stickup	pvc	
	MW-29	shallow	3.77				9.35	27.32	23.55	flush	pvc	Sediment on probe.
Ì.	MW-30	shallow	4.42				10.48	28.08	23.66	flush	pvc	Sediment on probe.
ſ	MW-31	shallow	4.35				10.61	27.95	23.60	flush	pvc	
ĺ.	MW-32	shallow	WA				WA	32.51	WA	stickup	pvc	Well was sealed on March 29, 1996.
į,	MW-33	shallow	9.63				16.99	31.72	22.09	stickup	pvc	Sediment on probe.
PB S	eries:		:									
ľ	PB-1	shallow	4.38				N/A	21.78	17.40	stickup	2" g.steel	Well filled with sediment.
	PB-2	shallow	1.22				5.82	21.25	20.03	stickup	2" g.steel	Product on probe (DNAPL)**.
	PB-4	shallow	1.50				5.16	21.52	20.02		2" g.steel	

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

-- : Not detected by product interface meter.

N/A: Well not accessible.

(a) : Subsurface investigation in December 1995 near MW-1 revealed that MW-1 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

(b) : Construction data for MW-26 reveal that MW-26 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

WA: Well was sealed on March 29, 1996. Refer to April 1996 Progress Report for details.

* : In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

** : Though the product interface meter did not register presence of product in the well, product was observed on the probe.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

TABLE 2:

WELL CONSTRUCTION DATA

Hexcel Facility Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls

(WellInfo July97)

	Well ID	Type	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation	i	Vell ruction *	Insta	allation	Water Table Elv > Top of Scree
				Casing	(7/28/97)	Screen	Screen	(7/28/97)	Type	Casing	Date	Ву	Elv.
ew s	eries:									**************************************			
	RW1-1	shall.	28.67	28.24	14.30	10	23.67	23.55	flush	s.steel	10/91	Heritage	No
•	RW6-1	shall.	29.28	28.84	N/A	5	20.28	N/A	flush	s.steel	8/90	Heritage	N/A
	RW6-2	shall.	U U	29.34	14.79	5	U 20.26	26.27	flush	s.steel		Heritage	U
	RW6-3	shall.	29.02	28.72	5.45	5	27.52	24.98	flush	s.steel	********	Heritage	No
ſ	RW7-1	shall.	26.94	26.25	16.53	5	13.94	20.53	flush	s.steel	8/90	Heritage	Yes
	RW7-2	shall.	27.07	26.48	16.81	5	14.57	20.29	flush	s.steel	8/90	Heritage	Yes
	RW7-3	shall.	27.17	26.78	17.25	5	14.67	20.39	flush	s.steel	8/90	Heritage	Yes
į	RW7-4	shall.	27.60	27.11	19.10	5	13.60	20.37	flush	s.steel	8/90	Heritage	Yes
į	RW7-5	shall.	27.97	27.57	19.25	5	12.97	20.26	flush	s.steel	9/90	Heritage	Yes
	RW7-6	shall.	27.10	26.48	14.97	5	17.10	19.69	flush	s.steel	9/90	Heritage	Yes
ļ	RW7-7	shall.	27.25	26.89	14.86	5	17.25	20.08	flush	s.steel	9/90	Heritage	Yes
ş	RW7-8	shall.	26.71	25.90	14.97	5	16.71	20.46	flush	s.steel	9/90	Heritage	Yes
ļ	RW7-9	shall.	27.18	26.87	16.17	5	15.18	20.08	flush	s.steel	2/91	Heritage	Yes
į	RW7-10	shall.	26.50	26.10	14.17	5	16.50	19.17	flush	s.steel	2/91	Heritage	Yes
	RW15-1	shall.	30.43	29.95	14.89	10	25.68	23.27	flush	s.steel	8/90	Heritage	No
į	RW15-2	shall.	30.37	30.15		10	26.37	NI	flush	s.steel	8/90	Heritage	NI
Serie	es:												
Ī	P-1	shall.	U	30.09	9.50	U	U	23.74	flush	1.5" pvc	U	U	U
	P-2	shall.	U	30.19	WA	U	U	WA	flush	1.5" pvc	U	U	U, WA
I Seri	ies:												
ſ	PI-1	deep	U	26.90		U	U	NI	flush	s.steel	10/91	Heritage	^

TABLE 2:

WELL CONSTRUCTION DATA

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering
October 1997

File: Quarterl/Qrtr97.xls

(WellInfo July97)

	Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation	1	ell uction *	Insta	ıllation	Water Table Elv > Top of Scree
				Casing	(7/28/97)	Screen	Screen	(7/28/97)	Туре	Casing	Date	Ву	Elv.
V S	eries:												
	CW-1	shail.	30.27	29.77	11.45	5	23.27	23.01	flush	s.steel	9/90	Heritage	No
	CW-2	shall.	30.11	29.51		5	23.11	NI	flush	s.steel	9/90	Heritage	NI
	CW-3	recov.	U	29.72		5	U	NI	flush	s.steel	9/90	Heritage	NI
	CW-4	shall.	29.10	28.83	10.96	5	22.60	23.03	flush	s.steel	7/90	Heritage	Yes
	CW-5	recov.	28.89	28.67		5	22.39	NI	flush	s.steel	7/90	Heritage	NI
	CW-6	shall.	29.25	28.93		5	25.25	NI	flush	s.steel	9/90	Heritage	NI
	CW-7	shall.	26.70	26.13	13.99	5	17.70	18.62	flush	s.steel	8/90	Heritage	Yes
	CW-8	shall.	26.70	26.77	13.90	5	17.70	18.55	flush	s.steel	8/90	Heritage	Yes
	CW-9	recov.	26.60	26.37		5	17.60	NI	flush	s.steel	8/90	Heritage	NI
į	CW-10	shall.	26.50	25.91	10.21	5	17.50	18.61	flush	s.steel	8/90	Heritage	Yes
	CW-11	recov.	26.60	25.74		5	17.60	NI	vaultbox	s.steel	8/90	Heritage	NI
	CW-12	shall.	26.51	25.71	13.95	5	17.51	18.53	flush	s.steel	8/90	Heritage	Yes
	CW-13	shall.	26.60	26.05		5	17.60	NI	flush	s.steel	8/90	Heritage	NI
ĺ	CW-14	shall.	26.70	26.37	13.88	5	17.70	18.82	flush	s.steel	8/90	Heritage	Yes
(CW-15	recov.	26.90	26.31		5	17.90	NI	flush	s.steel	8/90	Heritage	NI
	CW-16	shall.	27.00	26.45	13.91	5	18.00	18.99	flush	s.steel	8/90	Heritage	Yes
	CW-17	shall.	27.10	26.25	13.94	5	18.10	19.43	flush	s.steel	8/90	Heritage	Yes
	CW-18	recov.	27.20	26.61		5	18.20	NI	flush	s.steel	8/90	Heritage	NI
ĺ	CW-19	shall.	27.20	26.50		5	18.20	NI	flush	s.steel	8/90	Heritage	NI
[CW-20	shall.	27.30	26.74		5	18.30	NI	flush	s.steel	8/90	Heritage	NI
-	CW-21	recov.	27.40	26.77		5	18.40	NI	flush	s.steel	8/90	Heritage	NI
Ì	CW-22	shall.	27.30	26.35		5	18.30	NI	flush	s.steel	8/90	Heritage	NI

WELL CONSTRUCTION DATA

Hexcel Facility Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

October 1997

File: Quarterl/Qrtr97.xls

(WellInfo July97)

Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation	I	/ell uction *	Insta	allation	Water Table Elv. > Top of Screen
	<u> </u>		Casing	(7/28/97)	Screen	Screen	(7/28/97)	Туре	Casing	Date	Ву	Elv.
IW Series:			•									
MW-1	(a)	29.03	32.42	23.52	5	13.88	22.71	stickup	DVC	7/88	Environ	(a)
MW-2	shall.	27.90	31.00	10.25	5	26.13	23.52	stickup	pvc	8/88	Environ	No
MW-3	deep	27.84	31.13	30.75	5	5.30	20.93	stickup	DVC	8/88	Environ	
MW-4	shall.	29.02	32.33	9.91	5	27.49	24.60	stickup	DVC	8/88	Environ	No
MW-5	deep	29.03	32.54	28.34	5	9.12	21.53	stickup	pvc	8/88	Environ	A
21											<u></u>	
MW-6	shall.	27.14	30.74	18.35	10	22.12	20.79	stickup	pvc	8/88	Environ	No
MW-7	deep	27.18	30.68	32.90	5	2.55	21.14	stickup	pvc	7/88	Environ	^
MW-8	shall.	26.92	30.26	17.35	10	22.98	18.49	stickup	pvc	8/88	Environ	No
MW-9	deep	26.89	29.83	29.55	5	5.09	21.16	stickup	pvc	7/88	Environ	^
MW-10	shall.	27.33	30.83	16.77	11	24.81	18.39	stickup	pvc	8/88	Environ	No
MW-11	deep	27.28	30.78	33.49	10	6.86	20.90	stickup	pvc	7/88	Environ	^
MW-12	shall.	27.62	31.01	17.21	10	24.05	20.80	stickup	pvc	8/88	Environ	No
MW-13	deep	27.63	31.16	33.19	5	2.89	21.59	stickup	pvc	7/88	Environ	^
MW-14	shall.	27.12	30.70	15.59	9	24.18	19.38	stickup	pvc	8/88	Environ	No
MW-15	deep	27.17	30.77	25.62	5	10.13	21.98	stickup	pvc	7/88	Environ	^
MW-16	shall.	26.71	29.69	12.64	5	22.14	23.26	stickup	pvc	8/88	Environ	Yes
MW-17	shall.	29.10	31,44	14.10	8	25.10	22.74	stickup	pvc	1/89	Environ	No No
MW-18	shall.	29.04	32.23	11.27	5	25.97	23.76	stickup	pvc	8/88	Environ	No
MW-19	deep	27.30	29.08	26.59	5	7.30	22.05	stickup	pvc	1/89	Environ	
MW-20	shall.	28.50	27.95	20.08	5	13.50	23.10	flush	pvc	*************	Heritage	Yes
***************************************						***	***************************************			***************************************		
MW-21	shall.	28.80	30.67	15.11	10	25.80	22.32	stickup	рус	9/90	Heritage	No
MW-22	shall.	28.73	28.45	8.24	5	25.73	23.11	flush	pvc	*************	Heritage	No
MW-23	shall.	27.83	27.51	9.60	5	22.83	23.69	flush	pvc		Heritage	Yes
MW-24	shall.	26.93	26.51	9.61	5	21.93	23.17	flush	pvc	**************	Heritage	Yes
MW-25	shall.	26.47	26.03	12.79	10	23.47	18.70	flush	pvc	9/90	Heritage	No

WELL CONSTRUCTION DATA

Hexcel Facility

Lodi, New Jersey

-All measurements in feet --All elevations in feet (NGVD)-

GEO Engineering October 1997

File: Quarterl/Qrtr97.xls

(WellInfo July97)

	Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation		Vell ruction *	Insta	allation	Water Table Elv. > Top of Screen
				Casing	(7/28/97)	Screen	Screen	(7/28/97)	Туре	Casing	Date	Ву	Elv.
MW S	Series:												
	MW-26	(b)	29.26	28.85	17.93	2	12.26	20.03	flush	2" pvc	12/90	Heritage	(b)
	MW-27	shall.	29.10	31.43	12.53	5	24.10	24.51	stickup	pvc	9/90	Heritage	Yes
	MW-28	shall.	27.50	29.68	14.81	10	24.50	19.27	stickup	pvc	9/90	Heritage	No
	MW-29	shall.	27.50	27.32	9.35	5	22.50	23.55	flush	pvc	2/91	Heritage	Yes
	MW-30	shall.	28.25	28.08	10.48	5	22.25	23.66	flush	pvc	2/91	Heritage	Yes
Ī	MW-31	shall.	28.33	27.95	10.61	5	22.33	23.60	flush	pvc	2/91	Heritage	Yes
Ī	MW-32	shall.	U	32.51	WA	6	U	WA	stickup	pvc	4/92	Heritage	WA
į	MW-33	shall.	U	31.72	16.99	10	U	22.09	stickup	pvc	4/92	Heritage	U
PB Se	ries:												
Ī	PB-1	shallow	17.46	21.78	N/A	1	16.46	17.40	stickup	2" g.steel	6/95	GEO	Yes
	PB-2	shallow	17.50	21.25	5.82	1	16.70	20.03		2" g.steel	6/95	GEO	Yes
	PB-4	shallow	17.52	21.52	5.16	1	16.72	20.02		2" g.steel	6/95	GEO	Yes

NOTES:

Refer to "Table 2: Summary of Well Construction Data" provided in Appendix B of Progress Report dated July 31, 1995 for the list of sources used for compiling this table.

All measurements of depths are from the top of casing unless otherwise noted.

N/A: Well was inaccessible on the day of quarterly monitoring.

NI: Well not included in the quarterly monitoring.

U: Unknown.

*: All wells 4" diameter unless otherwise noted.

- ^: Well is screened in the confined aquifer, therefore, the question is not applicable.
- (a): Ground water elevation data from MW-1 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.
- (b): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.
- WA: P-2 and MW-32 were sealed on March 29, 1996; refer to April 1996 Progress Report text for details.

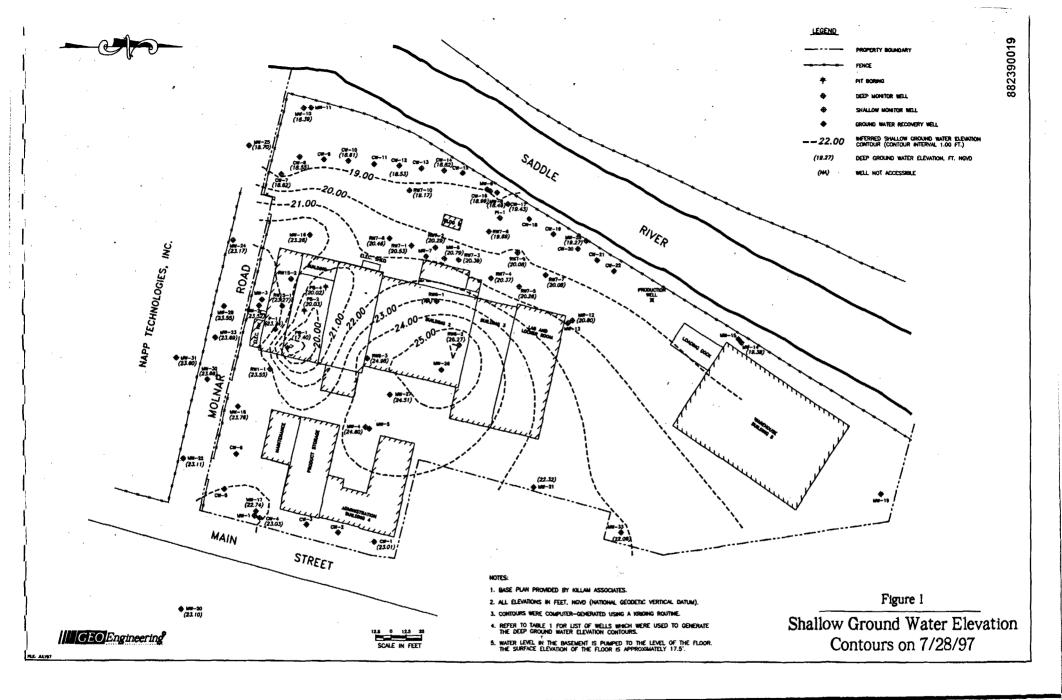
Contour Map Reporting Form

	e Name: Hexcel Facility, Lodi, NJ oject No.: 94039	Water levels taken on 7. Page 1 of 2	/28/97
	Did any surveyed well casing elevations change from the previous of the previous of the state of	son for the elevation	□Yes ☑No
2.	Are there any monitor wells in unconfined aquifers in which the wahigher than the top of the well screen? If yes, identify these wells.	ater table elevation is	⊻ Yes □No
	Monitor wells for which the water table elevations are higher than are identified in Table 2: Summary of Well Construction Data prov		
3.	Are there any monitor wells present at the site but omitted from the Unless the omission of the well(s) has been previously approved by the omissions.	<u>-</u>	⊈ Yes □No
	Quarterly ground water elevation monitoring plan approved by NJ letter. For information on additional omissions, please refer to Fig		
4.	Are there any monitor wells containing separate phase product during	ng this measuring event?	∑ Yes □No
	Were any of the monitor wells with separate phase product include contour map?	d in the ground water	✓Yes
	If yes, show the formula used to correct the water table elevation.		□No
	Water table elevation, for wells with LNAPL, was corrected using a Depth to Water (corrected) =	the following formula:	
	Depth to Water (measured) - (Product Thickness X Specific Gravity Specific gravity of 0.88 was used for calculation.	v)	
5.	Has the ground water flow direction changed more than 45 degrees ground water contour map? If yes, discuss the reasons for the change.	from the previous	□Yes ⊭ No
6.	Has ground water mounding and/or depressions been identified in a contour map?	the ground water	₩Yes
	Unless the ground water mounds and/or depressions are caused by remediation system, discuss the reasons for this occurrence.	the ground water	□No
	It is not known why mounding occurs in the vicinity of building 2.		

Site Name: Hexcel Facility, Lodi, NJ Project No.: 94039	Figure No.: 1 Water levels taken on 7/28/97 Page 2 of 2
7. Are all the wells used in the contour map screened in If no, justify inclusion of those wells.	the same water-bearing zone?
8. Were the ground water contours computer generated, computer aided, or ha If computer aided or generated, identify the interpolat Kriging Routine	

Contour Map Reporting Form

Project No.: 94039	Figure No.: 2 Water levels taken on 7/28/ Page 1 of 1	97
1. Did any surveyed well casing elevations change from the previous s If yes, attach new "Well Certification -Form B" and identify the rea change (damage to casing, installation of recovery system in monitor).	son for the elevation	Yes No
 Are there any monitor wells in unconfined aquifers in which the war higher than the top of the well screen? If yes, identify these wells. Not applicable because confined aquifer. 	-	Yes No
 Are there any monitor wells present at the site but omitted from the Unless the omission of the well(s) has been previously approved by the omissions. 	_	Yes No
4. Are there any monitor wells containing separate phase product during the work of the monitor wells with separate phase product included contour map? If yes show the formula used to correct the water table elevation.	l in the ground water	Yes No Yes
 Has the ground water flow direction changed more than 45 degrees ground water contour map? If yes, discuss the reasons for the change. 		Yes No
6. Has ground water mounding and/or depressions been identified in the contour map? Unless the ground water mounds and/or depressions are caused by the remediation system, discuss the reasons for this occurrence.		Yes Mo
7. Are all the wells used in the contour map screened in the same water If no, justify inclusion of those wells.		Yes No
8. Were the ground water contours computer generated, computer aided, or hand-drawn? If computer aided or generated, identify the interpolation method(s) Kriging method.	used.	



Appendix B

Monthly Monitoring

- Table 3: Monthly Water Level/Product Thickness Measurements for August 1997
- Table 4: Monthly Water Level/Product Thickness Measurements for September 1997

882390022

TABLE 3: MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS

FOR AUGUST 1997 Hexcel Facility

Lodi, New Jersey

GEO Engineering

October 1997

File: 94039/wldata/Monthly.xls Entered by: SG Check: RMS

-All measurements in feet -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED: 8/12/97

Well ID	Туре	Depth to Water	L	Product LNAPL	Product Thickness	Depth to Bottom	Elevation Top of	Water Elevation	Comments
							Casing		

CW-7	shallow	7.79				13.99	26.13	18.34	
CW-12	shallow	7.41				13.98	25.71	18.30	Product on probe (DNAPL)**
CW-16	shallow	7.96				13.93	26.45	18.49	Product on probe (DNAPL)**
MW-6	shallow	10.14				18.44	30.74	20.60	Product on probe (DNAPL)**
MW-8	shallow	12.22				17.35	30.26	18.04	Product on probe (DNAPL)**
RW6-1	shallow	NA				NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	5.91				16.55	26.25	20.34	Product on probe (DNAPL)**
RW7-4	shallow	7.10				19.05	27.11	20.01	Product on probe (DNAPL)**
PB-1	shallow	4.35				NM	21.78	17.43	Sediment on probe
PB-2	shallow	1.20				5.82	21.25	20.05	Product on probe (DNAPL)**

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

- -- Not detected by product interface meter.
- * In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
- ** Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
- NA Well not accessible for monitoring.
- NM Depth to bottom could not be measured due to sediment in the well.

882390023

TABLE 4: MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS

FOR SEPTEMBER 1997

Hexcel Facility Lodi, New Jersey GEO Engineering

October 1997

File: 94039/wldata/Monthly.xls Entered by: SG Check: RMS

-All measurements in feet -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED: 9/9/97

Well ID	Туре	Depth to Water	L	Product LNAPL	Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
CW-7	shallow	7.89				14.00	26.13	18.24	
CW-12	shallow	7.53				13.96	25.71	18.18	Product on probe (DNAPL)**
CW-16	shallow	8.19				13.93	26.45		Product on probe (DNAPL)**
MW-6	shallow	10.34				18.32	30.74	20.40	Product on probe (DNAPL)**
MW-8	shallow	12.34				17.36	30.26	17.92	Product on probe (DNAPL)**
RW6-1	shallow	NA				NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	6.18				16.54	26.25	20.07	
RW7-4	shallow	7.23				19.05	27.11	19.88	Product on probe (DNAPL)**
PB-1	shallow	4.38				NM	21.78	17.40	Sediment on probe
PB-2	shallow	1.14				5.82	21.25	20.11	Product on probe (DNAPL)**

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

- -- Not detected by product interface meter.
- * In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
- ** Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
- NA Well not accessible for monitoring.
- NM Depth to bottom could not be measured due to sediment in the well.

Appendix C

Product Recovery

Table 5: Product Collection (DNAPL) in Third Quarter of 1997

Table 6: Product Collection (LNAPL) in Third Quarter of 1997

882390025

TABLE 5: PRODUCT COLLECTION (DNAPL) IN THIRD QUARTER OF 1997

Hexcel Facility Lodi, New Jersey GEO Engineering

October 1997

File: 94039\prodcoll\prodcol2.xls Sheet: Third QD'97 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	CW-15 [^] (DNAPL)	TOTAL VOLUME RECOVERED
7/2/97		*	*	*	*	*	*	*	*		*	
7/10/97		*	*	*	*	*	*	*	*	0.1	*	
7/16/97		*	*	*	*	*	*	*	*	0.1	*	
7/25/97	0.1	*	*	*	*	*	*	*	*		*	
7/28/97 (Quaterly)				NA							*	
8/8/97	0.1	*	*	*	*	*	*	*	*	0.1	*	
8/12/97 (Monthly)			*	NA			*				*	
8/20/97		*	*	*	*	*	*	*	*	0.1	*	
8/28/97		*	*	*	*	*	*	*	*		*	
9/5/97		*	*	*	*	*	*	*	*	0.1	*	
9/9/1997 (Monthly)			*	NA			*				*	
9/18/97		*	*	*	*	*	*	*	*		*	
9/23/97		*	*	*	*	*	*	*	*		*	\
TOTAL VOLUME RECOVERED, 3rd QUARTER, 1997	0.2				~~					0.5		0.7
TOTAL VOLUME RECOVERED, 2nd QUARTER 1997	0.6							<u></u>		-		0.6
TOTAL VOLUME RECOVERED, 10/94 - 3/97	17.8	1.0	0.4	0.1	0.3	-		0.7	0.7	4.1	0.8	25.9
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	18.6	1.0	0.4	0.1	0.3			0.7	0.7	4.6	0.8	27.2

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

- Well not included in the weekly product recovery program.
- i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.
- CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.
- NA Well not available for monitoring due to drums.

TABLE 6: PRODUCT COLLECTION (LNAPL) IN THIRD QUARTER OF 1997

Hexcel Facility Lodi, New Jersey GEO Engineering

October1997

 $File: 94039 \\ prodcoll \\ prodcol2.xls$

Sheet: Third QL'97 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-15 [^] (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
7/28/97 (Quarterly)					NA			0.2		*				
7/29/9 7 8/8/97	*	*	*	*	*	*	*	1.0 0.1	*	*	*	*	*	
8/12/97 (Monthly)			*. *		NA *	*	*		+	*		*	*	
8/20/97 8/28/97	*	*	*	*	*	*	*		*	*	*	*	*	
9/5/97 9/9/97 (Monthly)	*	*	*	*	* NA	*	*		*	*	*	*	*	
					117									V
TOTAL VOLUME RECOVERED, 3rd QUARTER, 1997							_	1.3			<u>-</u>			1.3
TOTAL VOLUME RECOVERED, 2th QUARTER 1997								-			-			
TOTAL VOLUME RECOVERED, 10/94 - 3/97	6.7							1.3		<u></u>				8.0
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	6.7				- -			2.6						9.3

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

- * Well not included in the weekly product recovery.
- -- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.
- CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.
- NA Well not available for monitoring due to drums.

Appendix D

Waste Disposal Documentation

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION P.O. Box 13087

Austin, Texas 78711-3087



882390028

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L	20. Fa	cility Owner or Operator: Certification	of receipt of hazardous r	naterials cov	ered by this	s manifest	excep	t as noted in	ltem 19.			
Ţ											Date	
١	Pri	inted/Typed Name	***************************************	Signature	-					Month	Day	Year
												L



Department of the Environment - Waste Management Administration D Broening Highway Baltimore, 21224

nistration Hazardous Waste Program

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9/30/97

•		Manifest cument No. Page 1 2. of Information in the shaded areas is not required by Federal law.
	3. Generator's Name and Mailing Address	A. State Manifest Document Number MDC 0689776
	Hexcel Corporation 5794 W. Las Positas Blvd.	B. State Generator's ID Number
	Plansanton, CA 94588 (800)433-5072 Attn:A. William Nos11 4. Generator's Phone ()	SAME C. State Transporter's ID HWH 548
ļ	5. Transporter 1 (Company Name) 6. US EPA ID Number	Vehicle Sticker Number
	Sacration in the same of the s	D. Iransporter's Phone
	THERES IS IN MARINE LAKE	E. State Transporter's ID HWH
	7. Transporter 2 (Company Name) 8. US EPA ID Number	E. State Transporter's ID HWH Vehicle Sticker Number
		A DC
		F. Transporter's Phone
	9. Designated Facility Name and Site Address Laidlaw Environmental Services(TS), Inc.	G. State Facility ID
	3527 Whiskey Bottom Rd.	H. Facility's Phone
ì	Laurel, KD 20724 10. US EPA ID Number	3 0 1 -9 3 9 -6 000
ĺ	Mb 0 98 055 465 3	0.7
1	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) 12. Containers No. Ty	s 13. Total Quantity Unit I. Waste No. Pe>
?	a.RQ, Hazardous Waste Liquid, N.O.S., 9, SASOEZ 03 7 D	M BONGS WE OFF
	PGIII (Tetrachloroethylene, Trichloroethylene (PCB)	PCB2
	المارية	
	c.	
	d	
	J. Additional Description for Materials Listed Above	
	Physical Physical HAZ CODE State Specific Gravity Percentage HAZ CODE State Specific	ic Gravity Percentage K. Handling Codes for Waste Listed Above
		a. E. c.
	6. CD CD CD CD CD % d. CD CD CD	
		chap location: descal Corp.
	Emergency Resposse Guide # Ila)	205 Main St. Lodi. NJ 07644
	16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and at and are classified, packed, marked and labeled, and are in all respects in proper condition for transport	ccurately described above by proper shipping name
	and national government regulations and Maryland Statutes or Regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and	d toxicity of waste generated to the degree I have nent, storage, or disposal currently available to me quantity generator, I have made a good faith effort to
	determined to be economically practicable and that I have selected the practicable method of treatm which minimizes the present and future threat to human health and the environment; OR if I am a small or minimize my waste generation and select the best waste management method that is available to me and	nent, storage, or disposal currently available to me quantity generator, I have made a good faith effort to d that I can afford.
	Printed/Typed Name Signature	Date
	17. Transporter 1 (Acknowledgement of Receipt of Materials)	- <u> </u>
	Printed (Typed Name Signature	Date
	Mr. Drawest Die Chron	DK KINAIN 2
	18. Transporter 2 (Acknowledgement of Receipt of Materials) Printed/Typed Name Signature	Date
	19. Discrepancy Indication Space	
	20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest ex	cept as noted in Item 19.
	Printed/Typed Name Signature	Date
لـٰ		



State of New Jersey Department of Environmental Protection Hazardous Waste Regulation Program Manifest Section CN 421, Trenton, NJ 08625-0421

Please	e type or print in block letters. (Form designed i		iton, NJ U8625-U42 /pewriter.)		rm Approved.	OMB No. 205	0-0039. Exp	oires 9-30-97
	UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID N J D 9 8 6 5		lanifest ument No	2. Page 1 of 1	is not red	in the shad juired by Fed	
3	Generator's Name and Mailing Address Hexcel Corporation 5794 W. Las Positas Bivd.	Attn: Kevta 8	roener A. Willia	um Nosil	N.		6651	8
1 -	Patritar Prohe (CA 94588		5672		SAME	erator's ID-(Ge	iri.	14%
5	Transporter 1 Company Name	Bridgepart J. The.	US EPA ID Number	23.9	C. State Tran	s. ID-NJDEP Decal No	150	77.6
	Transporter 2 Company Name	8.	US EPA ID Number	1 1 1	D. Transporte	er's Phone (00 41	73/10
	. Designated Facility Name and Site Address	10.	US EPA ID Number		E. State Tran	s. ID-NJDEP Decal No		
	Laidlaw Environmental Serv	· 7			F. Transporte	r's Phone (
	Rt 322 \$ 1-295				G. State Facil			
-	Bridgeport, NJ 08014		19 5 3 2 8 5	2 3 9 12. Conta) 467-31	100
1	US DOT Description (Including Proper Shipping	Group)		No.		Total L	lait I	I. aste No.
l. a	RQ. Hazardous Waste X PGIII (XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	5 9, NA 3082		E	st.		
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<u> </u>					16 11 - 45 - 4	0 - 4 - 4 - 116 -		
	Additional Descriptions for Materials Listed About 1. E. DI) 22 1002	ve			K. Handling	Codes for Was	les Listed Abc	.ve
1 1	8, D039, D040	C.	The state of the s		a	931	:	
b.		d.			b.		1.	<u> </u>
1	5. Special Handling Instructions and Additional Info	ormation A. William	Nosil Pick	up Loca	ation: R	excel Co	erp:	
	11a) ERG # 171	(600)433	3-5072			05 Main 0 di, N.		
1	 GENERATOR'S CERTIFICATION: I hereby dec classified, packed, marked, and labeled, and are regulations. 							
	If I am a large quantity generator, I certify the to be economically practicable and that I have and future threat to human health and the eleand select the best waste management method	selected the practicable met nvironment; OR, if I am a si	thod of treatment, storage, mall quantity generator, I	or disposal	currently available	able to me wh	ch minimizes	the present
	Printed/Typed Name As agent on be Corporation Robert M.	epalf of Hexcel Snusko	Signature M	she			Month	Day Year
T 1 R -	 Transporter 1 Acknowledgement of Receipt of In Printed/Typed Name 		Signature			,	Month	Day Year
S	8. Transporter 2 Acknowledgement of Receipt of I	NER	Kemell	a	<u> </u>	asple	10174	1692
R T E R	Printed/Typed Name	 	Signature			- 	Month	Day Year
	9. Discrepancy Indication Space	SC098	7574647					
A C I L	9. Discrepancy Indication Space The Boundary B. 265 /)	an Street	Lodi, N.	J Z. 7	44		6M	
	0. Facility Owner or Operator: Certification of rece	······		cept as noted	in Item 19.	·		
٧	Printed/Typed Name CITY IN DU COUL		Signature (1/1/4)	W. 14	er lou	4 	Month C	Day Year

Appendix E

Schedule Estimates

Table 7: Estimated Schedule of Remaining Remedial Activities

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES **Hexcel Facility** Lodi, New Jersey



October 1997

File: 94039\progrpt\sched6.xls

TASK DESCRIPTION 1 2 3 5 6 7 10 8 9 11 12 GROUND WATER REMEDIATION DNAPL/LNAPL recovery (temporary) Recover water from basement Bldg. 1 Obtain off-site data from Army Corps well Reevaluate ground water remedial plans * Prep. design proposal for recov. sys. * NJDEP review of design proposal * install permanent recovery system * Operate and maintain recovery system * Install deep well in vicinity of MW-1 Replace well MW-26 Prepare a report of ground water results CLEANING OF SEWER LINE Cleanout/abandonment of sewer line * Collect samples (and lab. analysis) *

1997

Collect and analyze samples REPORTING Prepare quarterly progress reports Prepare final report * NJDEP review and site inspection * Case closure *

Disposal of sludge/debris *

EDIMENT SAMPLING

Reevaluate soil remedial plans Prepare a report of soil results

SOIL REMEDIATION.

Timing is dependent on availability of regional information.

Appendix A

Quarterly Monitoring

Table 1: Quarterly Water Level/Product Thickness Measurements (4/28/97)

Table 2: Well Construction Data

Contour Map Reporting Form for Figure 1

Figure 1: Shallow Ground Water Elevation Contours on 4/28/97

Contour Map Reporting Form for Figure 2

Figure 2: Deep Ground Water Elevation Contours on 4/28/97

TABLE 1:

QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/28/97)

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/Quartrly.xls

Entered by: SM Checked by: YS

Well ID	Туре	Depth to		Product	Product	Depth to	Elevation				ction (all 4" diameter unless otherwise noted)
		Water (4/28/97)	DNAPL	LNAPL	Thickness	Bottom (4/28/97)	Top of Casing	Elevation	Туре	Casing	Comments
RW Series:											
RW1-1	shallow	4.99			 	14.32	28.24	23.25	flush	s.steel	
RW6-1	shallow	N/A				N/A	28.84	N/A	flush	s.steel	Not accessible; pallets of drums covering the well.
RW6-2	shallow	3.50				14.86	29.34	25.84	flush	s.steel	Orange sediment on probe.
RW6-3	shallow	3.74				5.46	28.72	24.98	flush	s.steel	
RW7-1	shallow	5.28				16.62	26.25	20.97	flush	s.steel	
RW7-2	shallow	5.76				16.88	26.48	20.72	flush	s.steel	Sediment on probe.
RW7-3	shallow	5.95				17.24	26.78	20.83	flush	s.steel	Sediment on probe
RW7-4	shallow	6.26				19.06	27.11	20.85	flush	s.steel	Sediment on probe.
RW7-5	shallow	6.85				19.26	27.57	20.72	flush	s.steel	
RW7-6	shallow	5.95				15.03	26.48	20.53	flush	s.steel	
RW7-7	shallow	-				N/A	26.89	N/A	flush	s.steel	Under Water (puddle) - No measurement possible
RW7-8	shallow	4.69				15.02	25.90	21.21	flush	s.steel	
RW7-9	shallow	6.48				16.18	26.87	20.39	flush	s.steel	Sediment on probe.
RW7-10	shallow	6.62				14.22	26.10	19.48	flush	s.steel	Sediment on probe
RW15-1	shallow	6.78				14.92	29.95	23.17	flush	s.steel	Sediment on probe.
RW15-2	shallow						30.15		flush	s.steel	Well not included in quarterly monitoring plan.
Series:											
P-1	shallow	6.48				9.55	30.09	23.61	flush	1.5" pvc	Well appears to be filled with sediment.
P-2	shallow	WA				WA	30.19	WA	flush		Well was sealed on March 29, 1996.
I Series:											
PI-1							26.90				Well not included in quarterly monitoring plan

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/Quartrly.xls Entered by: SM Checked by: YS

Well ID	Туре	Depth to Water		Product LNAPL	Product Thickness	•	Elevation Top of	Water Elevation		Casing	ction (all 4" diameter unless otherwise noted)
		(4/28/97)	DNAPL	LNAPL	I IIICKIIESS	(4/28/97)	Casing	Elevation	Type	Casing	Comments
W Series:					1						
CW-1	shallow	6.80		 		11.48	29.77	22.97	flush	s.steel	
CW-2	shallow	******************			***************************************	•••••••	29.51		flush	s.steel	Well not included in quarterly monitoring plan.
CW-3	shallow	***************************************		· · · · · · · · · · · · · · · · · · ·	***************************************		29.72		flush	s.steel	Recovery well; not included in monitoring plan.
CW-4	shallow	5.88				11.01	28.83	22.95	flush	s.steel	
CW-5	shallow				***************************************		28.67	••••••	flush	s.steel	Recovery well; not included in monitoring plan.
CW-6	shallow				••••••		28.93	••••••	flush	s.steel	Well not included in quarterly monitoring plan.
CW-7	shallow	5.85				14.08	26.13	20.28	flush	s.steel	
CW-8	shallow	6.51				13.97	26.77	20.26	flush	s.steel	
CW-9	shallow		•••••				26.37		flush	s.steel	Recovery well; not included in monitoring plan.
CW-10	shallow	6.31				10.31	25.91	19.60	flush	s.steel	
CW-11	shallow						25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan.
CW-12	shallow	5.85				14.02	25.71	19.86	flush	s.steel	Product on probe (DNAPL).
CW-13	shallow		• • • • • • • • • • • • • • • • • • • •				26.05		flush	s.steel	Well not included in quarterly monitoring plan.
CW-14	shallow	6.94				13.94	26.37	19.43	flush	s.steel	
CW-15	shallow	.,,,,	•••••	•••••			26.31		flush	s.steel	Recovery well; not included in monitoring plan.
CW-16	shallow	6.02				13.96	26.45	20.43	flush	s.steel	Product on probe (DNAPL).
CW-17	shallow	5.36				14.01	26.25	20.89	flush	s.steel	
CW-18	shallow						26.61		flush	s.steel	Recovery well; not included in monitoring plan.
CW-19	shallow					***************************************	26.50		flush	s.steel	Well not included in quarterly monitoring plan.
CW-20	shallow		***************************************				26.74		flush	s.steel	Well not included in quarterly monitoring plan.
CW-21	shallow						26.77		flush	s.steel	Recovery well; not included in monitoring plan.
CW-22	shallow						26.35		flush	s.steel	Well not included in quarterly monitoring plan.

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/Quartrly.xls Entered by: SM Checked by: YS

Well ID	Type	Depth to Water		Product	Product Thickness	-	Elevation Top of	Water Elevation		Casing	ction (all 4" diameter unless otherwise noted) Comments
		(4/28/97)	DNAFL	LNAFL	HICKHESS	(4/28/97)	Casing	Elevation	Type	Casing	Comments
W Series:											
MW-1	(a)	9.56				23.58	32.42	22.86	stickup		
MW-2	shallow	7.28				10.28	31.00	23.72	stickup	pvc	
MW-3		8.88				30.82	31.13	22.25	*****************	pvc	Cadiment on make
MW-4	deep shallow	7.85				10.94	32.33	24.48	stickup stickup	pvc	Sediment on probe
MW-5		9.98				20.41	32.54	22.56	****************	pvc	
[deep	7.70				20.41	32.34	22.30	stickup	pvc	
MW-6	shallow	9.88				18.33	30.74	20.86	stickup	pvc	Product on probe (DNAPL).
MW-7	deep	8.24				32.92	30.68	22.44	stickup	pvc	
MW-8	shallow	9.23				17.40	30.26	21.03	stickup	pvc	Sediment/Product (DNAPL) on probe
MW-9	deep	7.30				29.66	29.83	22.53	stickup	рус	
MW-10	shallow	10.13				16.77	30.83	20.70	stickup	pvc	Sediment on probe
MW-11	deep	8.54				33.59	30.78	22.24	stickup	pvc	
MW-12	shallow	10.21				17.26	31.01	20.80	stickup	рус	
MW-13	deep	8.43				33.27	31.16	22.73	stickup	pvc	
MW-14	shallow	8.64				15.63	30.70	22.06	stickup	pvc	
MW-15	deep	7.68				25.63	30.77	23.09	stickup	pvc	
MW-16	shallow	6.22				12.69	29.69	23.47	stickup	pvc	
MW-17	shallow	8.60				14.12	31.44	22.84	stickup	pvc	Sediment on probe.
MW-18	shallow	8.70				11.32	32.23	23.53	stickup	pvc	
MW-19	deep	6.11				26.65	29.08	22.97	stickup	pvc	
MW-20	shallow	4.74				19.87	27.95	23.21	flush	pvc	
MW-21	shallow	8.41				15.18	30.67	22.26	stickup	pvc	Sediment on probe
MW-22	shallow	4.96				8.26	28.45	23.49	flush	pvc	
MW-23	shallow	4.11				9.64	27.51	23.40	flush	pvc	Brown sediment on probe.
MW-24	shallow	3.02				9.71	26.51	23.49	flush	pvc	
MW-25	shallow	6.02				12.78	26.03	20.01	flush	pvc	

TABLE 1:

QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/28/97)

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/Quartrly.xls Entered by: SM Checked by: YS

We	ell ID	Туре	Depth to	Depth to	Product	Product	Depth to	Elevation	Water	We	ll Construc	ction (all 4" diameter unless otherwise noted)
			Water (4/28/97)	DNAPL	LNAPL	Thickness	Bottom (4/28/97)	Top of Casing	Elevation		Casing	Comments
MW S	eries:											
	MW-26	(b)	8.22				17.48	28.85	20.63	flush	2" pvc	
	MW-27	shallow	7.03				12.56	31.43	24.40	stickup	pvc	
	MW-28	shallow	8.53				14.82	29.68	21.15	stickup	pvc	Orange/brown sediment on probe
	MW-29	shallow	3.82				9.36	27.32	23.50	flush	рус	Brown sediment on probe.
	MW-30	shallow	5.26				10.51	28.08	22.82	flush	pvc	Orange sediment on probe.
	MW-31	shallow	4.55				10.64	27.95	23.40	flush	рус	
	MW-32	shallow	WA		***************************************		WA	32.51	WA	stickup	pvc	Well was sealed on March 29, 1996.
	MW-33	shallow	9.41				17.02	31.72	22.31	stickup	pvc	Orange sediment on probe.
PB Ser	ies:											
<u> </u>	PB-1	shallow	N/A				N/A	21.78	N/A	stickup	2" g.steel	Well filled with sediment; No measurement possible
•	PB-2	shallow	1.06				5.84	21.25	20.19	stickup	2" g.steel	Sediment on probe.
	PB-4	shallow	1.36				5.17	21.52	20.16			Sediment on probe.

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

-- : Not detected by product interface meter.

N/A: Well not accessible.

(a) : Subsurface investigation in December 1995 near MW-1 revealed that MW-1 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

(b) : Construction data for MW-26 reveal that MW-26 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

WA: Well was sealed on March 29, 1996. Refer to April 1996 Progress Report for details.

* : In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

TABLE 2:

WELL CONSTRUCTION DATA

Hexcel Facility Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/wellscrn.xls

W	ell ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation	· ·	Vell ruction *	Insta	allation	Water Table Elv > Top of Scree
				Casing	(4/28/97)	Screen	Screen	(4/28/97)	Туре	Casing	Date	Ву	Elv.
RW Seri	ies:												
ļ	RW1-1	shall.	28.67	28.24	14.32	10	23.67	23.25	flush	s.steel	10/91	Heritage	No
Ī	RW6-1	shall.	29.28	28.84	N/A	5	20.28	N/A	flush	s.steel	8/90	Heritage	N/A
<u> </u>	RW6-2	shall.	U	29.34 [.]	14.86	5	U	25.84	flush	s.steel	8/90	Heritage	U
	RW6-3	shall.	29.02	28.72	5.46	5	27.52	24.98	flush	s.steel	8/90	Heritage	No
	RW7-1	shall.	26.94	26.25	16.62	5	13.94	20.97	flush	s.steel	8/90	Heritage	Yes
	RW7-2	shall.	27.07	26.48	16.88	5	14.57	20.72	flush	s.steel	8/90	Heritage	Yes
	RW7-3	shall.	27.17	26.78	17.24	5	14.67	20.83	flush	s.steel	8/90	Heritage	Yes
	RW7-4	shall.	27.60	27.11	19.06	5	13.60	20.85	flush	s.steel	8/90	Heritage	Yes
	RW7-5	shall.	27.97	27.57	19.26	5	12.97	20.72	flush	s.steel	9/90	Heritage	Yes
<u></u>	RW7-6	shall.	27.10	26.48	15.03	5	17.10	20.53	flush	s.steel	9/90	Heritage	Yes
	RW7-7	shall.	27.25	26.89	N/A	5	17.25	N/A	flush	s.steel	9/90	Heritage	N/A
	RW7-8	shall.	26.71	25.90	15.02	5	16.71	21.21	flush	s.steel	9/90	Heritage	Yes
	RW7-9	shall.	27.18	26.87	16.18	5	15.18	20.39	flush	s.steel	2/91	Heritage	Yes
	RW7-10	shall.	26.50	26.10	14.22	5	16.50	19.48	flush	s.steel	2/91	Heritage	Yes
[]	RW15-1	shall.	30.43	29.95	14.92	10	25.68	23.17	flush	s.steel	8/90	Heritage	No
	RW15-2	shall.	30.37	30.15	********************	10	26.37	NI	flush	s.steel	8/90	Heritage	NI
Series:													
	P-1	shall.	U	30.09	9.55	U	U	23.61	flush	1.5" pvc	U	U	U
	P-2	shall.	U	30.19	WA	U	U	WA	flush	1.5" pvc	U	U	U, WA
Series	s:												
	PI-1	deep	Ü	26.90		Ū	Ü	NI	flush	s.steel	10/91	Heritage	^

TABLE 2:

WELL CONSTRUCTION DATA

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/wellscrn.xls

Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation		ell uction *	Insta	ıllation	Water Table Elv > Top of Scree
			Casing	(4/28/97)	Screen	Screen	(4/28/97)	Туре	Casing	Date	Ву	Elv.
W Series:								:				
CW-1	shall.	30.27	29.77	11.48	5	23.27	22.97	flush	s.steel	9/90	Heritage	No
CW-2	shall.	30.11	29.51		5	23.11	NI	flush	s.steel	9/90	Heritage	NI
CW-3	recov.	U	29.72		5	U	NI	flush	s.steel	9/90	Heritage	NI
CW-4	shall.	29.10	28.83	11.01	5	22.60	22.95	flush	s.steel	7/90	Heritage	Yes
CW-5	recov.	28.89	28.67		5	22.39	NI	flush	s.steel	7/90	Heritage	NI
CW-6	shall.	29.25	28.93		5	25.25	NI	flush	s.steel	9/90	Heritage	NI
CW-7	shall.	26.70	26.13	14.08	5	17.70	20.28	flush	s.steel	8/90	Heritage	Yes
CW-8	shall.	26.70	26.77	13.97	5	17.70	20.26	flush	s.steel	8/90	Heritage	Yes
CW-9	recov.	26.60	26.37		5	17.60	NI	flush	s.steel	8/90	Heritage	NI
CW-10	shall.	26.50	25.91	10.31	5	17.50	19.60	flush	s.steel	8/90	Heritage	Yes
CW-11		26.60	25.74		5	17.60	NI	vaultbox	s.steel	8/90	Heritage	NI
CW-12	shall.	26.51	25.71	14.02	5	17.51	19.86	flush	s.steel	8/90	Heritage	Yes
CW-13	shall.	26.60	26.05	***************************************	5	17.60	NI	flush	s.steel	8/90	Heritage	NI
CW-14	shall.	26.70	26.37	13.94	5	17.70	19.43	flush	s.steel	8/90	Heritage	Yes
CW-15	recov.	26.90	26.31		5	17.90	NI	flush	s.steel	8/90	Heritage	NI
CW-16		27.00	26.45	13.96	5	18.00	20.43	flush	s.steel	8/90	Heritage	Yes
CW-17	shall.	27.10	26.25	14.01	5	18.10	20.89	flush	s.steel	8/90	Heritage	Yes
CW-18	recov.	27.20	26.61		5	18.20	NI	flush	s.steel	8/90	Heritage	NI
CW-19	shall.	27.20	26.50	***************************************	5	18.20	NI	flush	s.steel	8/90	Heritage	NI
CW-20	shall.	27.30	26.74		5	18.30	NI	flush	s.steel	8/90	Heritage	NI
CW-21	recov.	27.40	26.77		5	18.40	NI	flush	s.steel	8/90	Heritage	NI
CW-22	shall.	27.30	26.35		5	18.30	NI	flush	s.steel	8/90	Heritage	NI

WELL CONSTRUCTION DATA

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/wellscrn.xls

Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation	•	/ell uction *	Inst	allation	Water Table Elv > Top of Scree
			Casing	(4/28/97)	Screen	Screen	(4/28/97)	Туре	Casing	Date	Ву	Elv.
W Series:												
MW-	1 (a)	29.03	32.42	23.58	5	13.88	22.86	stickup	pvc	7/88	Environ	(a)
MW-	2 shall.	27.90	31.00	10.28	5	26.13	23.72	stickup	pvc	8/88	Environ	No
MW-	3 deep	27.84	31.13	30.82	5	5.30	22.25	stickup	pvc	8/88	Environ	^
MW-	shall.	29.02	32.33	10.94	5	27.49	24.48	stickup	pvc	8/88	Environ	No
MW-	5 deep	29.03	32.54	20.41	5	9.12	22.56	stickup	pvc	8/88	Environ	^
MW-	shall.	27.14	30.74	18.33	10	22.12	20.86	stickup	DVC	8/88	Environ	No
MW-		27.18	30.68	32.92	5	2.55	22.44	stickup	pvc	7/88	Environ	
MW-		26.92	30.26	17.40	10	22.98	21.03	stickup	pvc	8/88	Environ	No
MW-		26.89	29.83	29.66	5	5.09	22.53	stickup	pvc	7/88	Environ	^
MW-1		27.33	30.83	16.77	11	24.81	20.70	stickup	pvc	8/88	Environ	No
MW-1	1 deep	27.28	30.78	33.59	10	6.86	22.24	stickup	pvc	7/88	Environ	······································
MW-1		27.62	31.01	17.26	10	24.05	20.80	stickup	pvc	8/88	Environ	No
MW-1	3 deep	27.63	31.16	33.27	5	2.89	22.73	stickup	pvc	7/88	Environ	^
MW-1		27.12	30.70	15.63	9	24.18	22.06	stickup	pvc	8/88	Environ	No
MW-1	5 deep	27.17	30.77	25.63	5	10.13	23.09	stickup	pvc	7/88	Environ	~
MW-1	6 shall.	26.71	29.69	12.69	<u>5</u>	22.14	23.47	stickup	pvc	8/88	Environ	Yes
MW-1		29.10	31.44	14.12	8	25.10	22.84	stickup	pvc	1/89	Environ	No
MW-1		29.04	32.23	11.32	5	25.97	23.53	stickup	pvc	8/88	Environ	No
MW-1		27.30	29.08	26.65	5	7.30	22.97	stickup	pvc	1/89	Environ	^
MW-2		28.50	27.95	19.87	5	13.50	23.21	flush	pvc		Heritage	Yes
MW-2	1 shall.	28.80	30.67	15.18	10	25.80	22.26	stickup	pvc	9/90	Heritage	No
MW-2		28.73	28.45	8.26	5	25.73	23.49	flush	pvc	************	Heritage	No
MW-2		27.83	27.51	9.64	5	22.83	23.40	flush	pvc	*************	Heritage	Yes
MW-2		26.93	26.51	9.71	5	21.93	23.49	flush	pvc	*************	Heritage	Yes
MW-2		26.47	26.03	12.78	10	23.47	20.01	flush	pvc	9/90	Heritage	No

WELL CONSTRUCTION DATA

Hexcel Facility

Lodi, New Jersey

-All measurements in feet -All elevations in feet (NGVD)-

GEO Engineering

July 1997

File: 94039/wldata/wellscrn.xls

	Well ID	Туре	Ground Elevation	Elevation Top of	Depth to Bottom	Length of	Elevation Top of	Water Elevation		/ell uction *	Insta	llation	Water Table Elv. > Top of Screen
	<u>-</u>			Casing	(4/28/97)	Screen	Screen	(4/28/97)	Туре	Casing	Date	Ву	Elv.
MW S	Series:												
	MW-26	(b)	29.26	28.85	17.48	2	12.26	20.63	flush	2" pvc	12/90	Heritage	(b)
	MW-27	shall.	29.10	31.43	12.56	5	24.10	24.40	stickup	pvc	9/90	Heritage	Yes
	MW-28	shall.	27.50	29.68	14.82	10	24.50	21.15	stickup	pvc	9/90	Heritage	No
	MW-29	shall.	27.50	27.32	9.36	5	22.50	23.50	flush	pvc	2/91	Heritage	Yes
	MW-30	shall.	28.25	28.08	10.51	5	22.25	22.82	flush	pvc	2/91	Heritage	Yes
	MW-31	shall.	28.33	27.95	10.64	5	22.33	23.40	flush	pvc	2/91	Heritage	Yes
	MW-32	shall.	U	32.51	WA	6	U	WA	stickup	pvc	4/92	Heritage	WA
	MW-33	shall.	U	31.72	17.02	10	U	22.31	stickup	pvc	4/92	Heritage	Ŭ
PB Se	ries:												
	PB-1	shallow	17.46	21.78	N/A	1	16.46	N/A	stickup	2" g.steel	6/95	GEO	N/A
	PB-2	shallow	17.50	21.25	5.84	1	16.70	20.19		2" g.steel		GEO	Yes
	PB-4	shallow	17.52	21.52	5.17	1	16.72	20.16		2" g.steel		GEO	Yes

NOTES:

Refer to "Table 2: Summary of Well Construction Data" provided in Appendix B of Progress Report dated July 31, 1995 for the list of sources used for compiling this table.

All measurements of depths are from the top of casing unless otherwise noted.

N/A: Well was inaccessible on the day of quarterly monitoring.

NI: Well not included in the quarterly monitoring.

U: Unknown.

*: All wells 4" diameter unless otherwise noted.

^: Well is screened in the confined aquifer, therefore, the question is not applicable.

(a): Ground water elevation data from MW-1 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

(b): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

WA: P-2 and MW-32 were sealed on March 29, 1996; refer to April 1996 Progress Report text for details.

Contour Map Reporting Form

	e Name: Hexcel Facility, Lodi, NJ oject No.: 94039	Figure No.: 1 Water levels taken on 4/ Page 1 of 2	28/97
1.	Did any surveyed well casing elevations change from the previous If yes, attach new "Well Certification -Form B" and identify the rechange (damage to casing, installation of recovery system in monitorial contents of the co	ason for the elevation	□Yes ☑Mo
2.	Are there any monitor wells in unconfined aquifers in which the whigher than the top of the well screen? If yes, identify these wells.	ater table elevation is	☑Ýes □No
	Monitor wells for which the water table elevations are higher than are identified in Table 2: Summary of Well Construction Data pro		
3.	Are there any monitor wells present at the site but omitted from the Unless the omission of the well(s) has been previously approved by the omissions.	-	☑Yes □No
	Quarterly ground water elevation monitoring plan approved by No letter . For information on additional omissions, please refer to Fi		
4.	Are there any monitor wells containing separate phase product duri	ing this measuring event?	ĞYes □No
	Were any of the monitor wells with separate phase product include	ed in the ground water	_
	contour map? If yes, show the formula used to correct the water table elevation.		⊠Yes □No
	Separate phase product, where present, consisted of DNAPL, ther required for the water table elevation.	efore, no correction is	
5.	Has the ground water flow direction changed more than 45 degree ground water contour map? If yes, discuss the reasons for the change.	s from the previous	□Yes ☑Ño
6.	Has ground water mounding and/or depressions been identified in	the ground water	L
	contour map? Unless the ground water mounds and/or depressions are caused by remediation system, discuss the reasons for this occurrence.	the ground water	⊠Yes □No
	It is not known why mounding occurs in the vicinity of building 2.		

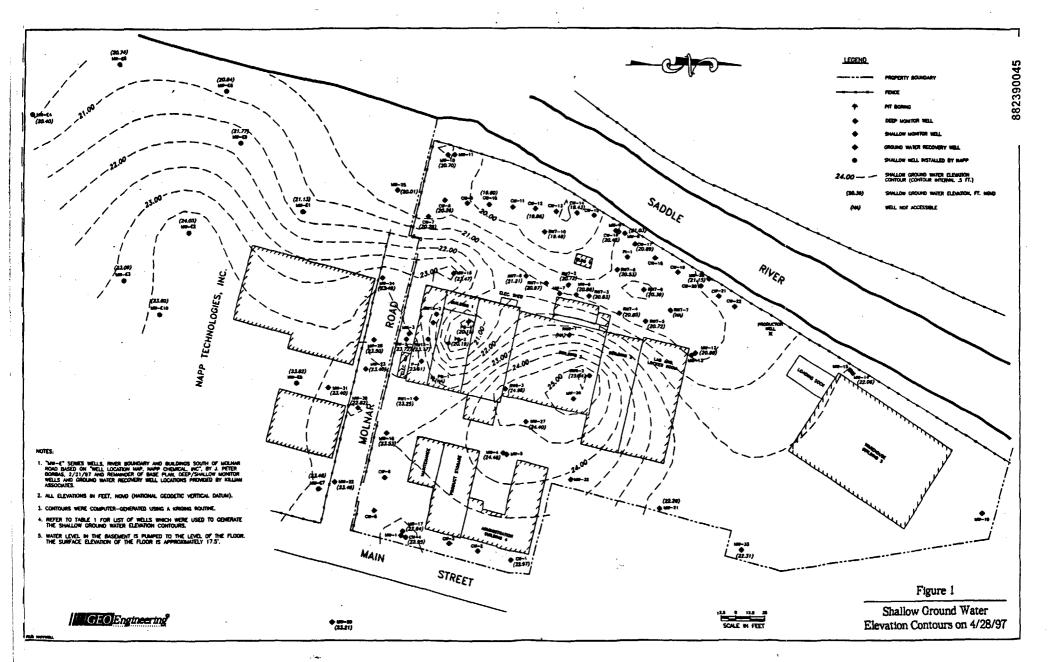
	e Name: Hexcel Facility, Lodi, NJ oject No.: 94039	Figure No.: 1 Water levels taken o Page 2 of 2	n 4/28/97
7.	Are all the wells used in the contour map screened in the same wells inclusion of those wells.	vater-bearing zone?	⊈Yes □No
8.	Were the ground water contours computer generated, computer aided, or hand-drawn If computer aided or generated, identify the interpolation method Kriging Routine		

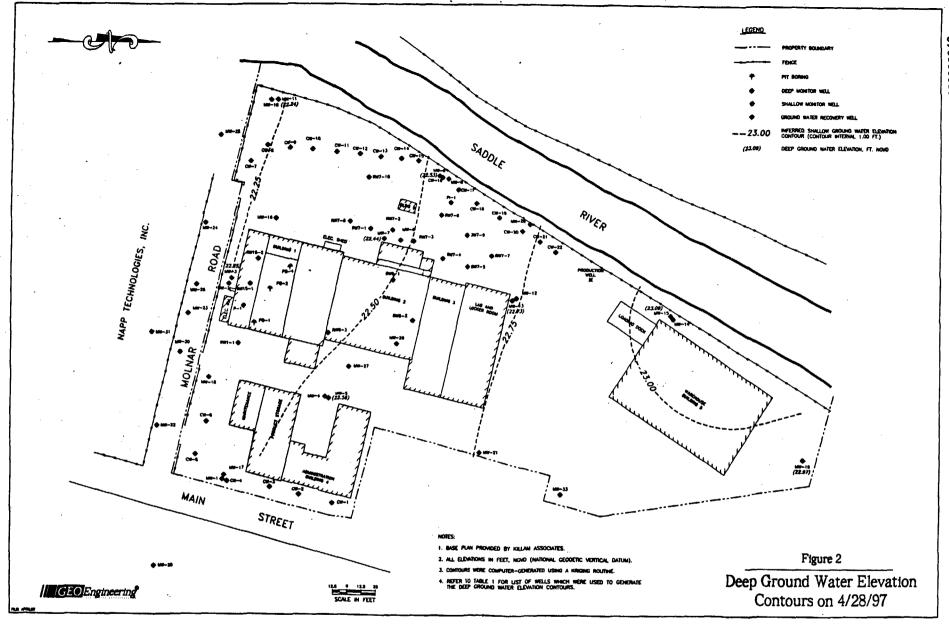
Contour Map Reporting Form

	e Name: Hexcel Facility, Lodi, NJ oject No.: 94039	Figure No.: 2 Water levels taken on 4 Page 1 of 1	/28/97
1.	Did any surveyed well casing elevations change from the previous If yes, attach new "Well Certification -Form B" and identify the reachange (damage to casing, installation of recovery system in monit	ason for the elevation	□Yes ☑Ño
2.	Are there any monitor wells in unconfined aquifers in which the wahigher than the top of the well screen? If yes, identify these wells.	ater table elevation is	□Yes □No
	Not applicable because confined aquifer.		
3.	Are there any monitor wells present at the site but omitted from the Unless the omission of the well(s) has been previously approved by the omissions.	-	□Yes ☑Ño
4.	Are there any monitor wells containing separate phase product during	ng this measuring event?	□Yes ☑No
	Were any of the monitor wells with separate phase product include	d in the ground water	
	contour map? If yes show the formula used to correct the water table elevation.		□Yes তুর্মo
5.	Has the ground water flow direction changed more than 45 degrees ground water contour map?	from the previous	□Yes
	If yes, discuss the reasons for the change.		₽Ŋo
6.	Has ground water mounding and/or depressions been identified in a contour map?	the ground water	⊓Yes
	Unless the ground water mounds and/or depressions are caused by remediation system, discuss the reasons for this occurrence.	the ground water	<u>Ω</u> √o
7.	Are all the wells used in the contour map screened in the same water of the same wat	er-bearing zone?	⊠¶es □No
8.	Were the ground water contours computer generated, computer aided, or hand-drawn? If computer aided or generated, identify the interpolation method(s) used.	
	Kriging method.		

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Appendix B

Monthly Monitoring

- Table 3: Monthly Water Level/Product Thickness Measurements for May 1997
- Table 4: Monthly Water Level/Product Thickness Measurements for June 1997

TABLE 3:

MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS

FOR MAY 1997 Hexcel Facility Lodi, New Jersey GEO Engineering

July 1997

File: 94039/wldata/Monthly.xls Entered by: SM Check: RMS

-All measurements in feet -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED: 5/15/97

Well ID	Туре	Depth to Water	Depth to	Product LNAPL	Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
CW-12	shallow	6.92				13.98	25.71	18.79	Product on probe (DNAPL,sludge)**
CW-16	shallow	7.21				13.94	26.45	••••••	Product on probe (DNAPL,sludge)**
MW-6	shallow	9.87	18.13		0.17	18.30	30.74	20.87	Product on probe (DNAPL)
MW-8	shallow	11.61				17.34	30.26	18.65	Product on probe (DNAPL,sludge)**
RW6-1	shallow	NA				NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	5.54				16.56	26.25	20.71	Brown sediment on probe
RW7-4	shallow	6.70				19.06	27.11	20.41	Product, brown sediment on probe (DNAPL)**
PB-1	shallow	2.36				5.20	21.78	19.42	Sediment on probe
PB-2	shallow	1.05				5.82	21.25	20.20	Sediment on probe

NOTES:

All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

- Not detected by product interface meter.
- * In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
- ** Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
- NA Well not accessible for monitoring.

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TABLE 4: MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS

FOR JUNE 1997 Hexcel Facility Lodi, New Jersey GEO Engineering

July 1997

File: 94039/wldata/Monthly.xls Entered by: SM Check: RMS

-All measurements in feet -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED: 6/18/97

Well ID	Туре	Depth to Water	L	Product LNAPL	Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
CW-12	shallow	7.25				13.80	25.71	18.46	Product on probe (DNAPL,sludge)**
CW-16	shallow	7.56				13.91	26.45	*	Product on probe (DNAPL,sludge)**
MW-6	shallow	10.09	18.13		0.19	18.32	30.74	•	Product on probe (DNAPL)
MW-8	shallow	11.92				17.35	30.26	18.34	Product on probe (DNAPL,sludge)**
RW6-1	shallow	NA				NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	5.80				16.54	26.25	20.45	
RW7-4	shallow	6.95				19.04	27.11	20.16	Product on probe (DNAPL)
· PB-1	shallow	2.30				5.12	21.78	19.48	Sediment on probe
PB-2	shallow	1.14				5.80	21.25	20.11	Brown/white sediment on probe

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

- -- Not detected by product interface meter.
- * In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
- ** Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
- NA Well not accessible for monitoring.

Appendix C

Product Recovery

Table 5: Product Collection (DNAPL) in Second Quarter of 1997

Table 6: Product Collection (LNAPL) in Second Quarter of 1997

TABLE 5: PRODUCT COLLECTION (DNAPL) IN SECOND QUARTER OF 1997

Hexcel Facility Lodi, New Jersey **GEO Engineering**

July 1997

File: 94039\prodcoll\prodcol2.xls Sheet: Second QD'97 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	CW-15^ (DNAPL)	TOTAL VOLUME RECOVERED
4/10/97	0.2	*	*	*	*	*	*	*	*		*	
4/16/97		*	*	*	*	*	*	*	*		*	
4/24/97	0.2	*	*	*	*	*	*	*	*		*	
4/28/97 (Quaterly)				NA							*	
5/5/97		*	*	*	*	*	*	*	*		*	
5/15/97 (Monthly)	0.1		*	NA			*				*	
5/21/97		*	*	*	*	*	*	*	*		*	
5/30/97		*	*	*	*	*	*	*	*		*	
6/4/97	%	*	*	*	*	*	*	*	*		*	
6/10/97		*	*	*	*	*	*	*	*		*	
6/18/97 (Monthly)			*	NA		- -	*				*	
6/26/97	0.1	*	*	*	*	*	*	*	*		*	
TOTAL VOLUME RECOVERED, 2st QUARTER, 1997	0.6		-								_	0.6
TOTAL VOLUME RECOVERED, 1st QUARTER 1997	1.4		1					j,	0.2			1.6
TOTAL VOLUME RECOVERED, 10/94 - 12/96	16.4	1.0	0.4	0.1	0.3			0.7	0.5	4.1	0.8	24.3
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	18.4	1.0	0.4	0.1	0.3			0.7	0.7	4.1	0.8	26.5

Notes:

For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

- * Well not included in the weekly product recovery program.
- -- i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.
- ^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.
- NA Well not available for monitoring due to drums.
- % Product Recovery not possible due to pump-malfunction

 TABLE 6:
 PRODUCT COLLECTION (LNAPL) IN SECOND QUARTER OF 1997

Hexcel Facility Lodi, New Jersey GEO Engineering

July 1997

File: 94039\prodcoll\prodcol2.xls Sheet: Second QL'97 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-15 (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
4/28/97 (Quarterly) 5/15/97 (Monthly) 6/18/97 (Monthly)			*	 	NA NA NĄ			*		*		*	*	V
TOTAL VOLUME RECOVERED, 1st QUARTER, 1997														0.0
TOTAL VOLUME RECOVERED, 4th QUARTER 1996	<u></u>					-								0.0
TOTAL VOLUME RECOVERED, 10/94 - 9/96	6.7		- -					1.3					~-	8.0
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	6.7					_		1.3						8.0

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

- * Well not included in the weekly product recovery.
- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.
- ^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.
- NA Well not available for monitoring due to drums.

Appendix D

Schedule Estimates

Table 7: Estimated Schedule of Remaining Remedial Activities

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES Hexcel Facility Lodi, New Jersey



July 1997

File: 94039\progrpt\sched6.xls

1997

1997											
1	2	3	4	5	6	7	8	9	10	11	12
				,							
						7.0					
					,						
•											
								4-61	- 1		
						111			10.0		
				<u> </u>							
								1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9 10	

^{*} Timing is dependent on availability of regional information.